

WHAT IS CLAIMED IS:

1. A laminated ceramic electronic component which is mounted on a mounting substrate, comprising:
  - a component main member including a plurality of ceramic layers;
  - an internal circuit element provided inside the component main member; and
  - an external terminal electrode provided on a first main surface of the component main member and electrically connected to the mounting substrate;wherein
  - the external terminal electrode includes an exposed portion that is exposed at the first main surface and an embedded portion that extends into at least a portion of the peripheral edge of the exposed portion so as to be embedded in the component main member.
2. A laminated ceramic electronic component according to Claim 1, wherein the embedded portion of the external terminal electrode comprises a first bending portion provided in the peripheral edge of the exposed portion of the external terminal electrode.
3. A laminated ceramic electronic component according to Claim 2, wherein the embedded portion of the external terminal electrode further comprises a second bending portion in communication with the first bending portion.
4. A laminated ceramic electronic component according to Claim 1, wherein the embedded portion extends along a length of at least about 30  $\mu\text{m}$  substantially in parallel to the first main surface of the component main member.
5. A laminated ceramic electronic component according to Claim 1, wherein the external terminal electrode is electrically connected to the internal circuit element.

6. A laminated ceramic electronic component according to Claim 1, wherein the peripheral edge of the external terminal electrode includes an area which extends in an arc-shape in plan view.

7. A laminated ceramic electronic component according to Claim 2, wherein the first bending portion comprises an outside bending portion and an inside bending portion, the outside bending portion is arranged on a first imaginary straight line that is substantially perpendicular to the first main surface, and the inside bending portion is arranged on a second imaginary straight line that is substantially parallel to the first imaginary straight line and not overlapping the first imaginary straight line.

8. A laminated ceramic electronic component according to Claim 7, wherein the first imaginary straight line is located on the imbedded portion side with respect to the second imaginary straight line, and the distance between the first imaginary straight line and the second imaginary straight line is in the range of about 2  $\mu\text{m}$  to about 20  $\mu\text{m}$ .

9. A laminated ceramic electronic component according to Claim 1, wherein the average thickness of the embedded portion is less than the thickness of the exposed portion.

10. A laminated ceramic electronic component according to Claim 9, wherein the average thickness of the embedded portion is in the range of about 2  $\mu\text{m}$  to about 20  $\mu\text{m}$ , and the thickness of the exposed portion is in the range of about 4  $\mu\text{m}$  to about 30  $\mu\text{m}$ .

11. A laminated ceramic electronic component according to Claim 1, wherein the embedded portion is arranged so as to be extended toward the inside of the component main member in an arch shape.

12. A laminated ceramic electronic component according to Claim 1, further comprising a ground electrode provided in the component main member in

opposition to the external terminal electrode, the ground electrode having a concavity provided therein and having a shape and size corresponding to that of the embedded portion of the external terminal electrode.

13. A method of producing a laminated ceramic electronic component which is mounted on a mounting substrate, the method comprising the steps of:

forming a green laminate main member including a plurality of laminated ceramic green sheets, the green laminate main member having an internal circuit element formed therein;

forming, on a first main surface of the green laminate main member extending in the same direction as the ceramic green sheets, an external terminal electrode which is electrically connected to the mounting substrate;

forming the green laminate main member including a step of molding the green laminate main member such that a region which is on the first main surface side of the green laminate main member and where the external terminal electrode is to be formed includes a convexity; wherein

the step of forming the external terminal electrode includes the steps of preparing a ceramic green sheet defining an outer layer which is lined with a carrier film and which includes a hole formed in a region corresponding to the convexity such that the carrier film is exposed through the hole;

forming a conductive past film defining the external terminal electrode, and extending from the carrier film exposed through the hole to the peripheral edge portion defining the hole;

laminating the outer-layer ceramic green sheet lined with the carrier film on the green laminate main member while the hole and the convexity are arranged so as to be aligned with each other to form a green component main member;

peeling off the carrier film from the outer-layer ceramic green sheet;

and

pressing the green component main member in the lamination direction; and

firing the green component main member.

14. A method of producing a laminated ceramic electronic component according to Claim 13, wherein the step of preparing the outer-layer ceramic green sheet includes a step of removing the outer-layer ceramic green sheet lined with the carrier film from the carrier film in the region corresponding to the convexity, whereby the hole is formed in the outer-layer ceramic green sheet.

15. A method of producing a laminated ceramic electronic component according to Claim 13, wherein the conductive paste film is formed so as to extend on the peripheral edge portion defining the hole in a width of at least about 30  $\mu\text{m}$ .

16. A method of producing a laminated ceramic electronic component according to Claim 13, wherein no conductive paste film is formed on the outer-layer green sheet except at the peripheral edge portion defining the hole.

17. A method of producing a laminated ceramic electronic component according to Claim 13, wherein the step of molding the green laminate main member includes a step of pressing the green laminate member in the lamination direction with a metallic mold having a concavity corresponding to the convexity.

18. A method of producing a laminated ceramic electronic component which is mounted onto an appropriate substrate, comprising the steps of:

forming a green laminate main member including a plurality of laminated ceramic green sheets, the green laminate main member including an internal circuit element formed therein, the green laminate main member having a conductive paste film, which is to be an external terminal electrode electrically connected to the mounting substrate, on a first main surface of the green laminate main member extended in the same direction as the ceramic green sheets;

molding the green laminate main member such that a convexity is formed in a region which is on the first main surface side of the green laminate main member and which has the conductive paste formed thereon, a concavity is formed in

a region where no external terminal electrode is to be formed, and the conductive paste film is also provided in the boundary portion between the convexity and the concavity;

preparing an outer-layer ceramic green sheet having a hole formed in a region corresponding to the convexity;

laminating the outer-layer ceramic green sheet onto the green laminate main member while the hole and the convexity are located so as to be aligned with each other to form a green component main member;

pressing the green component main member in the lamination direction; and

firing the green component main member.

19. A method of producing a laminated ceramic electronic component according to Claim 18, wherein the conductive paste film is formed in a region having a width that is at least about 30  $\mu\text{m}$  greater than the region where the external terminal electrode is to be formed.

20. A method of producing a laminated ceramic electronic component according to Claim 18, wherein no conductive paste film is formed in a region which is on the first main surface side of the green laminate main member and in which no external terminal electrode is to be formed, the region excluding the boundary portion between the convexity and concavity.

21. A method of producing a laminated ceramic electronic component according to Claim 18, wherein the step of molding the green laminate main member includes a step of pressing the green laminate main member in the lamination direction with a metallic mold having a concavity corresponding to the convexity and a convexity corresponding to the concavity.